

REMARKS/ARGUMENTS

Claims 1-2, 4-7 and 9-20 are active.

Claims 1 and 9 have been amended to further define the film-forming agent and excludes polyacrylic.

No new matter is added.

The rejection in view of U.S. 4,090,984 to Lin combined with U.S. 6,086,791 to Miller and U.S. 3,406,126 to Litant. The Examiner finds that Lin generally teaches the claimed composition but not 44 to 75% of electrically conducting particles wherein at least 15% of the particles have a flake or needle shape as recited in Claim 1. Therefore, the Examiner cites to Miller and Litant because each of these documents teach conductive coatings with carbon pigments having a flake like structure (see page 3 of the Official Action). The Examiner views Lin's teachings of the content of carbon black identified in column 2, lines 31-35 in an amount of about 20-40 parts per 100 parts by wt to be close enough to 44% (the lower limit that we claim) to make the claims obvious (see the paragraph bridging pages 3-4 of the Official Action).

Applicants respectfully disagree.

While Applicants acknowledge that Lin teaches, in col. 2, about 40 parts per 100 parts by weight, when one of skill in the art considers Lin in its entirety the about 40 parts is not a point of overlap with the claimed lower limit of 44%. See *In re Kahn* 441 F.3d 977, 985-86 (Fed. Cir. 2006); "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant."

Lin's coating composition is an aqueous composition comprising at least one polyacrylate emulsion, a conductive carbon black dispersion and a thixotropic gelling agent (col. 1, lines 22-25). In the aqueous composition, the polyacrylate emulsion is present in a total amount within the range of from 40 to 80 parts per 100 parts by weight of the aqueous composition (col. 1, lines 60-63). The conductive carbon black dispersion is in an amount within the range of from 20 to about 40 parts per 100 parts by weight of the aqueous composition (col. 2, lines 32-35).

The surfactant is in an amount within the range of from 1 to about 5 parts per 100 parts by weight of the aqueous composition (col. 2, lines 32-35).

In Example 1, an aqueous coating composition is prepared by adding sequentially the components listed in columns 1 and 2 of Table 1. The content of the components expressed in % by weight of the aqueous composition is given in column 3. The percentage of the components expressed on the basis of the solid matter is given in column 4. Clearly, the amount of carbon black (25.9%) is lower than the amount defined in present claim 1.

Even though the amount of carbon black emulsion in Example 1 is increased from 35 parts to 40 parts (the maximum value disclosed by Line) and concomitantly the amount of the total polyacrylate emulsions is reduced by 5 parts, the percentage of carbon black based on the solid matter will never reach the minimal value of 44% according to present claim 1.

Accordingly, one of skill in the art "would be led in a direction divergent from the path that was taken by the applicant." *Id.*

Further and regarding the Examiner's findings and conclusions based on Lin's disclosure of including a polyacrylate emulsion (see col. 1, lines 40-45 and 60-64) considered with Miller's teachings that acrylic resins are suitable (page 5 of the Official Action), the

term polyacrylic is removed from the present claims and the cited prior art provides no teachings for the other film formers as is now defined in amended Claim 1.

Further, Applicants take issue with the underlying presumption of the combination of Line, Miller and Litant and submit that the reasons for combining the citations clearly was arrived in hindsight because certainly the motivation could not have been derived from the references themselves when considered in terms of what Miller and Litant actually teach.

Miller describes a paint (col. 2, line 66) to be applied on various substrates, for example floors, walls, ceilings, roof, gutter, outdoor structures, home/commercial appliances (col. 3, lines 1-21). Miller does not provide any salient teachings as to coatings on glass strands or glass strand structures according to present Claim 1.

In Miller's examples, the paint is applied on a glass pan or dish, or a metal pan. Furthermore, Miller's paint includes a large quantity of solvent (xylene) contrary to the electrically conducting coating composition according to Claim 9 which is aqueous. Therefore, Applicants find no basis to argue that one in the field of electrically conducting coating compositions on glass strands would look to Miller for any guidance whatsoever.

Litant teaches an electrically conducting composite which consists of a non-conducting moldable material having embedded therein unwoven carbon yarn filaments (col. 1, lines 15-18). In contrast, in the present claims, the glass strand and the glass strand structure are coated with an electrically conducting coating composition (not embedded therein). Litant requires that resinous or plastic materials are loaded with carbon or graphite granules in the form of either discrete particles or flakes to impart primary thermal conductivity to the base non-conductive matrix. Applicants find no basis to argue that one in the field of electrically conducting coating compositions on glass strands would look to Litant for any guidance whatsoever.

Therefore, reaching into Litant and Miller to include features of the present invention in the teachings of Lin must only have been done in hindsight in view of the fact that both Miller and Litant have nothing to do with the subject matter Applicants claim.

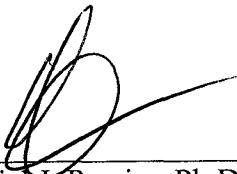
Furthermore, as explained in the background of the application in prior electrically conducting coating compositions the amount of conducting particles was relatively low achieving only low levels of electrical conductivity. Thus, the invention sought to improve the electrical conductivity by enabling the use of higher amounts of electrically conducting particles and optionally including doping agents to increase the conductivity (see page 9, starting at line 19 and pages 2-3).

In view of the above, withdrawal of the rejection is requested.

There being no further issues, a Notice of Allowance is also requested.

Respectfully submitted,

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